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wherein a difference in the expression of PGUI in the presence of the agent as compared with in the absence of the agent indicates that the agent modulates PGUI expression.

Please add new Claim 19 as follows:

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19. A method of identifying an agent which modulates expression of a gene which is modulated by the MAPK pathway, comprising the steps of:
- transforming a suitable host cell with an expression vector comprising a nucleic acid molecule encoding a gene which is modulated by the MAPK pathway under conditions suitable for expression of said gene;
 - contacting said host cell with an agent to be tested; and
 - comparing the expression of said gene in the presence of the agent with the expression of said gene in the absence of said agent,
- wherein a difference in the expression of said gene in the presence of the agent as compared with in the absence of the agent indicates that the agent modulates expression of a gene which is modulated by the MAPK pathway.

REMARKS

Amendments to the Specification

The Specification has been amended to correct typographical errors. No new matter has been added by these amendments.

Claim Amendments

Claims 10, 12, 13 and 17 have been cancelled.

Claim 9 has been amended to incorporate the subject matter of Claim 10.

Claims 9 and 15 have been amended as suggested by the Examiner to more clearly define the claimed invention.

New Claim 19 has been added. Support for Claim 19 can be found throughout the Specification, for example, at page 3, lines 5-14. No new matter has been added.

Affirmation of Election in Response to Restriction Requirement

Applicant hereby affirms the election of Group I (Claims 9-13 and 15). Applicant notes that the election was made in a telephone conversation between the Examiner and the undersigned on June 16, 2000.

Rejection of Claims 9-13 and 15 Under 35 U.S.C. §112, First Paragraph

Claims 9-13 and 15 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the Specification in such a way as to enable one skilled in the art to make and/or use the invention. The Examiner states that the nature of the invention is complex, that the guidance given by the Specification is minimal, and that it is unclear whether the term "filamentation MAPK pathway" encompasses only those genes expressed in the haploid invasive growth phase, genes expressed during the diploid filamentous growth phase or any gene expressed as part of the Kss1 MAPK pathway. Applicant notes that the entire text of the rejection is directed toward Claims 9-13; Applicant respectfully requests clarification as to the basis for rejection of Claim 15.

Claims 10, 12 and 13 have been cancelled. Claim 9 has been amended to recite that the expression vector comprises a nucleic acid molecule encoding TOT10/YELO33W. Applicant believes that this amendment obviates the majority of the rejection.

The Examiner states that the Specification does not provide a definition of what constitutes "inhibition" of the filamentation MAPK pathway, and that no guidance or suggested assay from the Specification for how one would determine if the filamentation pathway has been inhibited by the presence of a test agent. The Examiner further states that there are no working examples in the Specification in which the effects of a test agent on the filamentation pathway are assessed.

Applicant respectfully disagrees. Inhibition of the filamentation MAPK pathway is defined throughout the Specification (for example, page 4, line 11-15; page 4, line 17-21; page 8, line 7-11; page 9, line 13-21; page 10, line 1-4). Furthermore, galacturonic acid is a working example of a test compound that inhibits the filamentation MAPK pathway by decreasing TOT10/YELO33W expression which is essential in haploid invasive growth and diploid pseudohyphal development (page 2, line 27 through page 3, line 4). In light of the teachings of the Specification, Applicant believes that the Specification provides adequate teachings to enable

one skilled in the art to practice the invention within the scope of the Claims, as amended. Applicant respectfully requests reconsideration and withdrawal of the rejection.

Rejection of Claims 9-13 and 15 Under 35 U.S.C. §112, Second Paragraph

Claims 9-13 and 15 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Examiner states that in Claims 9 and 15 the term "providing" is a trivial step and does not add to the claim. Claims 9 and 15 have been amended as suggested by the Examiner.

The Examiner states that Claim 9 is vague and indefinite in that the metes and bounds of the phrase "comprising a nucleic acid molecules of a gene which is expressed" are unclear. Claim 9 has been amended to delete this phrase.

The Examiner states that Claim 9 is vague and indefinite in that the metes and bounds of the term "inhibits the filamentation MAPK pathway" are not clear. Applicants respectfully disagree. Inhibition of the filamentation MAPK pathway is defined throughout the Specification (for example, page 4, line 11-15; page 4, line 17-21; page 8, line 7-11; page 9, line 13-21; page 10, line 1-4). Thus, Applicant believes that the metes and bounds of the claimed invention are clearly defined. Reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (781) 861-6240.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

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